

PROJECT FACT SHEET CONSTRUCTION GENERAL

PROJECT NAME AND STATE: Ohio River, Emsworth Locks and Dams, Major Rehabilitation Project, PA

LOCATION AND DESCRIPTION: Emsworth Locks and Dams is the oldest of the 20 locks and dams that comprise the Ohio River navigation system. The original locks and fixed crest dams were constructed in 1919-1922. The gated dams, which were constructed in 1935-1938, extend on either side of Neville Island at river miles 6.2 and 6.8 as measured from the Point in Pittsburgh. The navigable portion of this pool is comprised of the upper 6.2 miles of the Ohio River, the lower 11.2 miles of the Monongahela River, and the lower 6.7 miles of the Allegheny River. Emsworth Locks and Dams are located in Allegheny County.

The proposed work pertains only to the two dams. The main channel dam consists of 8 - 100 ft. vertical lift gates and a 34 ft. fixed crest weir, while the back channel dam consists of 6 - 100 ft. gates. Five of the back channel gates are vertical lift gates and the other gate is a modified tainter-style gate referred to as a "Sidney Gate". The proposed project includes replacement of the dam gates, gate hoisting machinery, electrical power and distribution system and scour protection system. The project would also include work to the service bridge and localized areas of dam concrete for gate machinery anchorage purposes.

TOTAL PROJECT COST:	\$78,260,000
Total Federal Cost:	\$78,260,000
Total Non-Federal Cost:	\$ 0

NON-FEDERAL SPONSOR: The project is funded equally from General Appropriations from the U.S. Treasury and from the Inland Waterways Trust Fund.

CURRENT STATUS: The Main Report and Environmental Assessment were completed in July 2001. An Addendum providing Additional Justification and Clarification of the Recommended Work Activities was completed in December 2001. This completed all actions and the report was approved by HQUSACE in February 2002. Budget requests have been submitted in FY 2003, FY 2004, FY 2005 and FY 2006. Coordination with the Inland Waterways User Board is on-going. Emsworth Dams are presently in an exigent situation. There are 10 foot deep scour holes and 65 percent of the erosion protection missing downstream of the dams. Failure of one of any of the thirteen lift gates would most likely cause a portion of the stilling basin to fail and possibly undermine the dam. The reliability analyses show that the dam gates are only 24 percent reliable.. During low flow conditions loss of the pools of the Ohio, Monongahela and Allegheny Rivers at the Point of Pittsburgh may occur and all navigation would cease. If the Emsworth pool is lost, two major facilities dependent on river transportation are impacted – the US Steel Clairton Works, the largest coke plant in the US and the Bailey/Enslow Fork Complex owned by Consol Energy, the largest underground coal mine in the US. Disruption in coal supply and transportation would also impact steel plants and coal-fired electric power plants. The impact of the loss of Emsworth pool on the local economy and other communities would be substantial. Approximately 11,700 jobs would be directly at risk due to loss of navigation and disruption to services and material. The loss in wages alone would range from \$1.5 M to \$2.2 M per day. The systems are proven to be unreliable due to multiple failures within the past four years. The annual commodity tonnage through Emsworth is about 24 million tons. On 9 July 2004, \$4,500,00 was requested for FY 2005 under the Dam Safety and Seepage/Stability Correction (Wedge) program.

AUTHORIZATION: N/A

CONGRESSIONAL INTEREST: Hart (PA-4), Doyle (PA-14), Murphy (PA-18), Santorum (PA), Specter (PA)

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